



A Survey Based Study to Understand Customer Perception/ Views on Purchase of Recycled Plastic Product.

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June 28, 2023

A survey based study to understand customer perception/ views on purchase of recycled plastic product.

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Abstract:

In recently observed studies around the globe it has been noticed that plastic production and consumption have led to an outsized amount of plastic waste. However the plastic manufacturing industry is not affected and will continue to grow according to industry predictions even after the widely promoted concept of using products made from recycled plastic. Many studies show that the consumer awareness regarding plastic pollution has seen a significant growth in number and yet there are no sign of mass adoption being reported anywhere. This study analyses the consumer preference on purchase of recycled products in India by a structured survey of 210 participants currently residing in Gautam Budh Nagar district (U.P), India. A Simple statistical analysis is performed, such as descriptive study, dependent and independent variables statistical analysis in order to assess the consumer's general awareness about plastic pollution and their perception on recycled plastic products and willingness to pay for it. Factor model is used to analyze the underlying dimensions of a number of variables questions meant to access the general awareness, thinking and preferences of a customer. This study also tries to pinpoint the factor that creates the gap between consumer and supply of recycled plastic products.

Keywords: Plastic waste, recycled plastic product, Plastic pollution, Awareness, consumer awareness

Introduction:

Plastic manufacture industry has been having a rapid growth since its invention and its excessive demands across various industry sectors as well as end user uses. Some use case examples could be packaging, consumer items or fashion, engineering and construction, medicine and pharma, electrical and electronics, and textile. However it is also a known fact that plastic waste has also been on a rapid growth and was overlooked initially and later onwards the concept of recycled plastic products was introduced however the adoption of the recycled plastic industry has not been as rapid as it should have been. Theoretically recycled plastic products were supposed to slow down the manufacture of plastic in general but so far the results show that there has been little to no effect on the industry. On the consumer end there have also been several reports stating that the general public grows more aware of plastic pollution and understands why recycled plastic products should be used.

Literature review:

Dr Bikramjit Singh Hundal [3] in his study of green products concluded that the first rule of green marketing is to target client benefits, the primary reason why customers would favor to shop for specific product initially place. thus firms ought to motivate customers to try new brands or perhaps pay premium for the greener alternatives. It is not reaching to facilitate if a product is developed that is totally green in varied aspects however does not fulfill the client satisfaction criteria. This will also cause green shortsightedness conception within which different firms get profit by merchandising less expensive merchandise compare to environmental safe merchandise that are expensive. Additionally if the green merchandise has high costs other than it'll lose its market acceptableness. Thus firms ought to build long run policies for atmosphere property.

Rahida Ramli [4] conducted a survey in accordance with recycled bags for retail shopping and concluded that use of recycled bags for retail shopping was linked to aspects such as environmental consciousness, affordability, and attractiveness of the recycled bag style, as well as the bag's simplicity and convenience. The main takeaway was that in order to encourage buyers to use recycled bags, education is critical in instilling environmental consciousness.

Mohammad Aljaradin [5] concluded that the Majority of the respondent do not fully grasp the idea on how or where to recycle, this can be because of the fact that attempts to implement efficient recycling programmes and initiatives have failed, and it suggests that the existing awareness campaigns are insufficient and must be redesigned and enhanced. Finally, you can't expect opportunity to begin recycling plastic at their faculty, university residence, or workplace even if you've never provided them with the basic knowledge of facilities and have not taught them how to recycle.

Another author Riya Paul[6] mentions that plastic products are reasonable cheap and useful especially to the backward class and therefore a ban or certain prohibition on plastic product use cannot be the solution to the problem, the author also suggested that even with a developed methods to recycle plastic waste it is crucially important that the government pay extra attention to educating the general public of plastic waste and its effects.

Javeriya Siddiqui [7] reviewed various industry trends and concluded that Plastic waste management has become quite important in today's industry. In the Republic of India, numerous schemes are in place to reduce the impact of discarded plastic. One such concept for waste minimization of plastic products is recycling. It makes sense both environmentally and economically, and current trends show an outstanding increase in the rate of plastic waste recovery and application.

A study conducted by the united nation through their survey concluded various methods that should be acted upon in order to control the outspread of plastic pollution. This conclusion was reached upon a thorough analysis of 865 respondents based in Mumbai, India. The responses where thoroughly run againts various parameters to conclude the final results. These methods indicate that citizens, NGO's, and the government must work together in order for the methods to be carried out effectively.[8]

Methodology:

A survey with various demographic parameters was designed and circulated amongst the respondents via 2 methods.

1. Via website that had content related to recycled waste and the respondent can go through the content to get familiarized with the concept and fill the survey form on the website.
2. Via social media for respondents who wish to overlook the website content and fill the survey form directly.

The survey was designed in 2 parts where the first part would help us understand and evaluate the respondent on general parameter such as Name, age, gender and education background/ qualification, the second part help us understand and evaluate respondents awareness and willingness towards recycled plastic products.

Results:

The following data set was collected from the survey.

1. Basic information

Select your gender.

210 responses

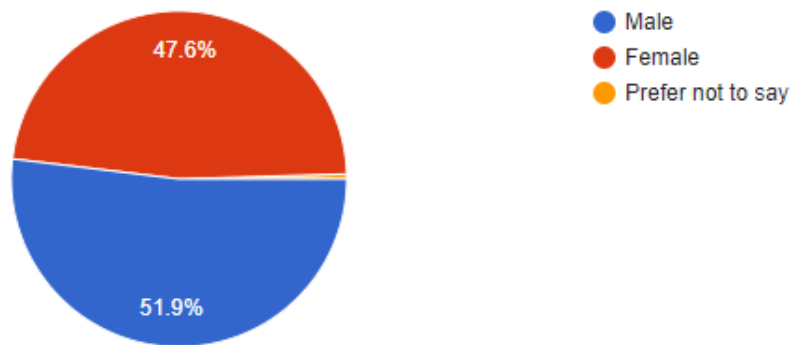


Fig:1

Interpretation: the respondents consisted of 109 females(47.6%) and 109 males (51.9%) and 1 respondent choose not to say option.

210 responses

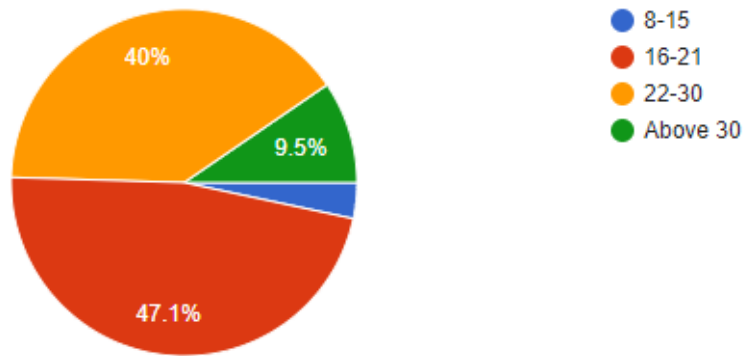


Fig.2

Interpretation: 3.3% respondents were of 8-15 age group , 47.1% were of 16-21 age group , 40% were of 22-30 age group and 9.5% were above the age of 30.

Which of the following describes you best?

210 responses

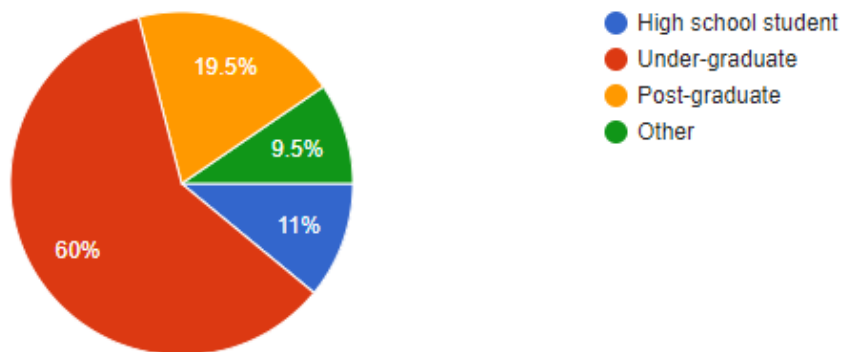


Fig.3

Interpretation: 11% of the respondents were high school students, 60% were undergraduate, 19.5% post graduate and 9.5% choose the option other.

(*NOTE: The option other refers to individuals who either did not continue their education or engaged in some sort of business)

2. Awareness

Are you aware of plastic waste and its effect ?

210 responses

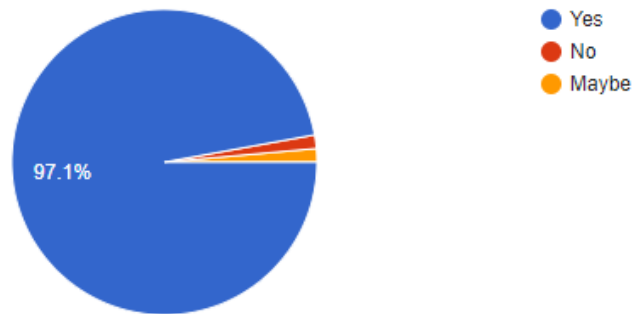


Fig.3

Are you aware of local plastic recycling process in your city?(ex. Droppoff , collection center , local vendors, etc)

210 responses

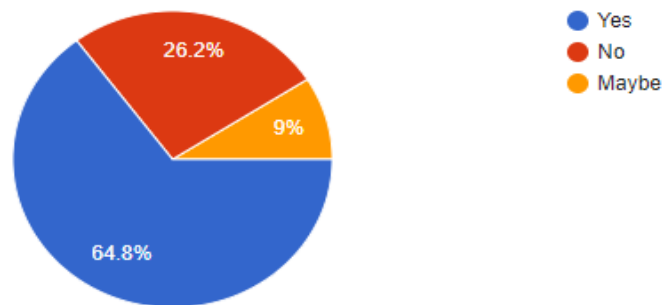


Fig.4

Interpretation: 97.1% of the respondents were aware about plastic waste and its effect however only 64.8% were aware of the actions taken by the city authorities in order to recycle plastic waste, furthermore 9 % were unsure and 26.2% were unaware.

3. Use of recycled products

Do you use recycled plastic products?

210 responses

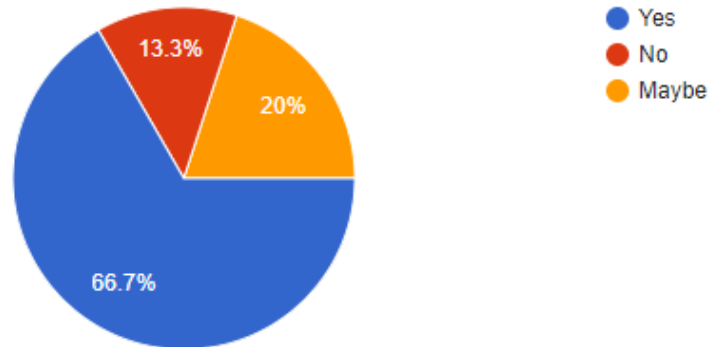


Fig.5

Interpretation: 66.7% respondents claim to use recycled products, 13.3% confirmed that they do not use recycled product and 20% were unsure.

4. Purchase and recommendation

Would consider buying products made from recycled plastic?

210 responses

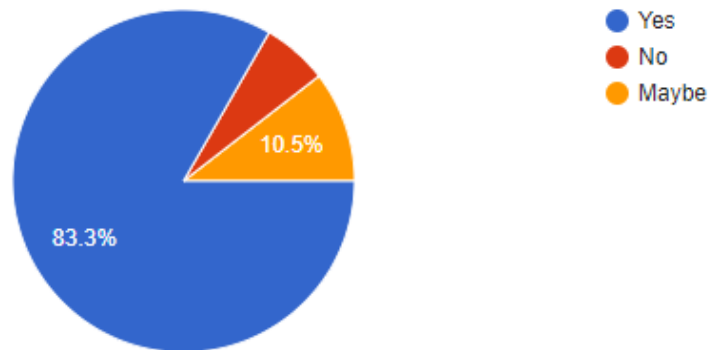


Fig.6

Would you recommend recycled plastic product to others?

210 responses

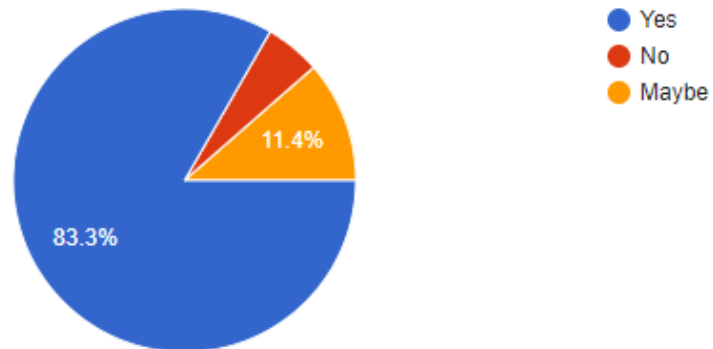


Fig.7

Interpretation: 83.3% respondents said that they would buy recycled products, 6.2% said no and 10.5 were unsure. Whereas 83.3% respondents would recommend others to try recycled plastic products, 5.2% responded no and 11.4% were unsure.

5. Price

210 responses

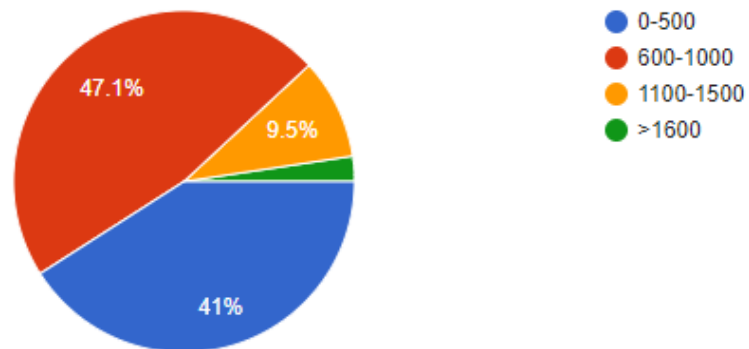


Fig.8

(*NOTE: the amount selected is being referred to Indian currency i.e. rupees)

Interpretation: Respondents choose the price point they were willing to pay if they come across products made from recycled products. Most respondents are willing to pay up to rs.1000 (rupees) for recycled plastic products.

Conclusion:

The acquired results indicate that the factors due to which recycled plastic products are not being adopted is due to the limited products being manufactured for the end use customer. And since the products being manufactured using recycled plastic are limited to certain categories (Bags , shoes ,doormats , flower pots etc) that the user simply choose to ignore as they are of no or little use and have no affect on the buyer if they buy the product or not.

It can also be concluded that a consumer with a educational background is highly likely to purchase products made from recycled plastic as they are able to grasp the concept of plastic waste and the issues that arise with it and therefore also have a high probability of purchasing and trying new products made from recycled plastic.

Suggestion:

- An increase in number of recycled plastic product categories is needed.
- The survey result also indicated that the price factor could affect the customer preference therefore the recycled plastic product should be manufactured at somewhat lower price than the price it would have been if it were manufactured with new plastic.

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[8]('Rethink Plastic' Campaign Promotion of Counter Measures against Marine Plastic Litter in Southeast Asia and India, 2020)